



Ruling

Shared Services and Facilities

Version 1.0 — March 2022



Cover photo: Stock photo

Published by

NSW Government

4 Parramatta Square

12 Darcy Street

Parramatta NSW 2150

PO Box A290

Sydney South NSW 2000

T: (02) 9995 5000 (switchboard)

T: 131 555 (environment information and publications requests)

TTY: 133 677 then ask for 131 555

Speak and Listen users: 1300 555 727 then ask for 131 555

Email: nabers@environment.nsw.gov.au

Website: www.nabers.gov.au

Contents

1	Introduction	1
1.1	Summary	1
1.2	Interpretation of the Rules and Rulings	1
1.3	Situations not covered by the Rules	1
1.4	How to use this document	1
1.5	Related documents	2
2	Terms and definitions	3
3	Key concepts and procedures	6
3.1	Purpose	6
3.1.1	General	6
3.1.2	Shared services	6
3.1.3	Shared facilities	6
3.2	Scope	6
3.2.1	General	6
3.2.2	Shared services	7
3.2.3	Shared facilities	7
3.3	Area threshold	7
3.3.1	General	7
3.3.2	Defining floor area	7
3.4	Location of shared facilities	8
3.5	Allocating energy and water use	9
3.5.1	General	9
3.5.2	Financial reconciliation	10
3.5.3	Area-based allocating	10
3.5.4	Full allocation	10
3.6	Metering	10
3.7	Documentation	11
4	Shared services	12
4.1	General	12
4.2	Vertical transport	12
4.3	Exterior lighting and external signage	13

4.3.1	General.....	13
4.3.2	Exterior lighting.....	14
4.3.3	External signage.....	14
4.4	Diesel and batch-delivered supplies.....	14
5	Shared facilities	16
5.1	General.....	16
5.2	Public access and exclusive use.....	16
5.3	Foyers, lobbies and common spaces.....	16
5.4	Car parks	18
5.5	Loading docks.....	19
5.6	Swimming pools and gyms	19
5.7	End-of-trip facilities	21
5.8	Restaurants	21
5.9	Exclusive hotel clubs.....	22
Appendix A	List of changes.....	23

1 Introduction

1.1 Summary

This document is a **Ruling** for the treatment of **shared services** and **shared facilities** in **precincts** and **mixed-use buildings**. It provides guidance for **Assessors** where such circumstances are present.

This **Ruling** will supersede the following documents:

- a) *NABERS Shared Facilities (20 May 2014)*
- b) *NABERS Shared Services for Mixed-use Buildings (December 2015)*

Note: For changes made from the amalgamation of these two documents, see Appendix A.

1.2 Interpretation of the Rules and Rulings

This **Ruling** is to be read in conjunction with the respective NABERS **Rules** as they apply to the specific building type.

Where a conflict between this **Ruling** and existing **Rules** is present, the requirements of the **Rules** take precedence over this **Ruling**.

This **Ruling** applies to any building type eligible for a NABERS rating using the NABERS Energy and Water rating tools.

1.3 Situations not covered by the Rules


Assessors must comply with the **Ruling** unless prior approval has been sought and approved by the **National Administrator**.

Where appropriate, **Assessors** may contact the **National Administrator** to propose an alternative methodology, outlining the circumstances and rationale. Prior approval for use is required and may be granted conditionally, on a case-by-case basis and at the **National Administrator's** discretion.

1.4 How to use this document

Text appearing **dark green and bold** is a defined term. Defined terms can be found in Section 2 of this **Ruling** or in the terms and definitions chapter of the respective **Rules** document.

The following formatting conventions might appear in this text:

 Important requirements and/or instructions are highlighted by an information callout box.

Note: Text appearing with a grey background is explanatory text only and is not to be read as part of the **Ruling** or is otherwise not essential for the purposes of this document.

Example: Text appearing with a green background is intended to demonstrate a worked example of the respective **Rules** section or **Ruling** section.

1.5 Related documents

The following documents have been referenced within these **Rules**:

NABERS The Rules — Energy and Water for Hotels, v3.2, 2015

NABERS The Rules — Energy and Water for Office, v4.1, 2020

NABERS The Rules — Energy and Water for Shopping Centres, v4.0, 2020

NABERS The Rules — Metering and Consumption, v1.3, 2021

[ABCB, National Dictionary of Building & Plumbing Terms](#)

National Construction Code, [Building classifications \(July 2020\)](#)

2 Terms and definitions

This chapter lists the key terms and their definitions that are integral to the proper use of this document.

Term	Definition
acceptable data	Data which meets the applicable accuracy and validity requirements of the Rules .
Assessor(s)	An accredited person authorised by the National Administrator to conduct NABERS ratings.
building section(s)	A group of spaces sharing a common function or use, such as office, retail or hotel functional spaces. Note: Preference is given to delineate such spaces by NABERS building types. However, the delineation between functions or uses may also be guided by the National Construction Code Building Classifications (July 2020).
Gross Floor Area (GFA)	The total floor area contained within a building, including the horizontal area of external walls.
Gross Lettable Area (GLA)	The floor area of spaces as determined in accordance with the Measurement Standard for warehouses, industrial buildings, free-standing supermarkets and showrooms.
Gross Lettable Area Retail (GLAR)	The floor area, determined in accordance with the Measurement Standard for shopping centres, of spaces that can be used as retail tenancies within the premises to be rated. Note: This is essentially the space within the permanent walls of the building, excluding spaces for the following: a) Public access and use (including stairs, escalators, lift lobbies and passageways). b) Building, mechanical, air conditioning, electrical and other utility services. c) Staff and cleaning facilities (including toilets, tea rooms and cleaners' cupboards) which are not part of a tenant's fitout. Tenant storage areas not adjacent to the tenancy are also excluded.
Measurement Standard	The standard used for determining the following: a) Net Lettable Area (NLA) for offices. b) Gross Lettable Area Retail (GLAR) for shopping centres.
mixed-use building(s)	A building comprised of multiple building sections .

Term	Definition
National Administrator	<p>For NABERS purposes, a building is not considered to be mixed-use when any one building section comprises 80 % or more of the total assessable area.</p> <p>The body responsible for administering NABERS, in particular the following:</p> <ol style="list-style-type: none"> Establishing and maintaining the standards and procedures to be followed in all aspects of the operation of the system. Determining issues that arise during the operation of the system and the making of ratings. Accrediting Assessors and awarding accredited ratings in accordance with NABERS standards and procedures. <p>The functions of the National Administrator are undertaken by the NSW Government.</p>
Net Lettable Area (NLA)	<p>The floor area, determined in accordance with the Measurement Standard for rated area, of spaces that can be used as offices within the rated premises.</p> <p>Note: This is essentially the space within the permanent walls of the building, but excluding spaces for the following:</p> <ol style="list-style-type: none"> Public access and use (including stairs, escalators, lift lobbies and passageways). Building mechanical, air conditioning, electrical and other utility services. Staff and cleaning facilities (including toilets, tea rooms, and cleaners' cupboards). <p>The Assessor should refer to the relevant Measurement Standard for rated area documents for a definitive list of inclusions and exclusions.</p>
offsite	<p>Located outside of the legal boundary of the building or precinct.</p>
onsite	<p>Located within the legal boundary of the building or precinct.</p>
precinct	<p>An area, building or group of buildings set aside typically for a specific purpose and separated from other incompatible uses, such as a shopping precinct or pedestrian precinct.</p>
rated premises	<p>The building or building section to be rated.</p>
rating period	<p>The 12-month base period for the rating, requiring at least 12 contiguous months of acceptable data upon which the rating is based.</p>
Rules	<p>Authoritative document produced by the National Administrator that specifies what must be covered by an Assessor in order to produce a rating.</p>

Term	Definition
Ruling(s)	An authoritative decision by the National Administrator which acts as an addition or amendment to the Rules .
shared facility	<p>Facilities or amenities with a defined area or location, that are one or all of the following:</p> <ol style="list-style-type: none">Provided onsite to multiple buildings.Provided onsite to a single building comprised of multiple building sections.A mixture of the above. <p>Occupants would require access to a shared facility to benefit from its provision.</p> <p>Note: Examples of shared facilities include (but are not limited to) the following:</p> <ol style="list-style-type: none">Cyclist and end of trip facilities.Loading docks.Central waste storage and collection areas.Foyers, lobbies and common spaces.
shared services	<p>Building services which are installed for the provision of comfort, lighting, safety or other operational necessity, that are one or all of the following:</p> <ol style="list-style-type: none">Provided onsite to multiple buildings.Provided onsite to a single building comprised of multiple building sections.A mixture of the above, e.g. precincts. <p>Shared services are not principle area or location based and would therefore not require giving access to occupants in order to benefit from its provision.</p> <p>Note: Examples of shared services include (but are not limited to) the following:</p> <ol style="list-style-type: none">Vertical transport such as lifts and escalators.Plant rooms.Mechanical switch rooms.Fire suppression systems.Exterior lighting and external signage.
total assessable area	The sum of assessable area of each building section , defined either in accordance with the Rules of that respective building section or otherwise within this Ruling .

3 Key concepts and procedures

3.1 Purpose

3.1.1 General

This **Ruling** is intended for **precincts** (including multiple buildings of the same type) and **mixed-use buildings** that incorporate a number of different **building sections** such as office, hotel, retail, residential and other miscellaneous areas where **shared services** and **shared facilities** may be present.

3.1.2 Shared services

The purpose of this methodology is to allocate the energy and water consumption associated with **shared services**. It applies to buildings that have two or more **building sections** with **shared services**. This may include (but is not limited to) a mix of office, hotel, retail and residential sections.

The **Rules** and **Rulings** may contain specific provisions to allocate the energy and water use associated with **shared services** among the premises that share them. An example of a specific provision already covered in the **Rules** and **Rulings** may be car parks for offices (see the *NABERS The Rules — Energy and Water for Office*, v4.1, Section 7.3.4). Where these specific provisions are present, these must be consulted first and take precedence over this **Ruling**, see Section 1.2.

3.1.3 Shared facilities

The purpose of this methodology is to allocate the energy and water consumption associated with **shared facilities**. It applies to any building rateable under the NABERS Energy and Water tools which shared common facilities with other buildings.

Shared facilities such as loading docks, swimming pools and common external grounds may not be covered in the respective **Rules** and their use by each premises cannot be adequately determined using submetering alone. This methodology allows for their allocating where they are not specifically addressed in the respective **Rules**.

3.2 Scope

3.2.1 General

This **Ruling** should be read in conjunction with the applicable **Rules** for the **building section** type being rated for the **rated premises**. It applies to any building rateable under the NABERS Energy and Water tools which have **shared services** or **shared facilities** within the building or **precinct**.

It is applicable to all NABERS ratings, except for the following:

- a) Office tenancy ratings.

- b) All data centres rating types.

3.2.2 Shared services

Shared services specifically covered in this **Ruling** are as follows:

- a) Vertical transport.
- b) Exterior lighting and external signage.
- c) Diesel and batch-delivered supplies.

Note: Assessors may propose other **shared services** to the **National Administrator** for consideration in this **Ruling**.

Other **shared services** may include grease arrestors, sewerage, storm or black water pumps and anaerobic digestors.

3.2.3 Shared facilities

Shared facilities specifically covered in this **Ruling** are as follows:

- a) Foyers, lobbies and common spaces.
- b) Car parks.
- c) Loading docks.
- d) Swimming pools and gyms.
- e) End-of-trip facilities.
- f) Restaurants.
- g) Exclusive hotel clubs.

Note: Assessors may propose other **shared facilities** to the **National Administrator** for consideration in this **Ruling**.

Other **shared facilities** may include shared meeting rooms, auditoriums and courtyards.

3.3 Area threshold

3.3.1 General

There is a threshold for the size of **building sections** for when this **Ruling** can be applied.

When conducting a rating, a **building section** must be at least 20 % of the **total assessable area** of the building to allocate energy and water using this **Ruling**. **Building sections** smaller than 20 % are not considered when allocating energy and water from a **shared service** or **shared facility**.

3.3.2 Defining floor area

Area is used as the key variable in allocating energy and water use. Depending on the **building section** type, the area measurement used can vary.

In this **Ruling**, the following apply:

- a) *Offices*: **Net Lettable Area (NLA)** must be used for allocation.
- b) *Shopping centres and retail*: **Gross Lettable Area Retail (GLAR)** must be used for allocation.

- c) *Warehouses, cold storage and industrial:* **Gross Lettable Area (GLA)** must be used for allocation.
- d) *Hotels and residential apartments:* **Gross Floor Area (GFA)** may be used for allocation.

Where there are sections of a building that do not use either of these measurement standards, such as a hotel or residential apartments, **GFA** may be used.

Note: An **Assessor** may contact the **National Administrator** to propose an alternative floor area measurement subject to approval.

3.4 Location of shared facilities

Shared facilities are classified as **onsite** when they are located within the legal boundaries of the premises where the rating is being conducted and/or its grounds (as shown on the title of the building). Where this is not the case, the **shared facility** is considered **offsite**.

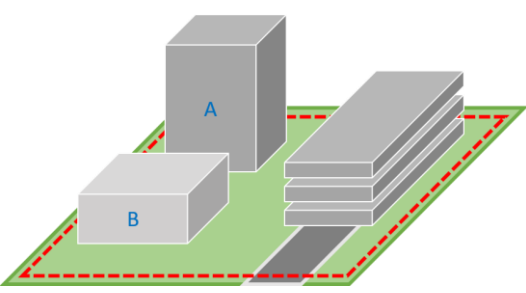
Onsite shared facilities are considered part of a building’s central facility. The energy and water use of an **onsite shared facility** must be included in a NABERS energy and water rating.

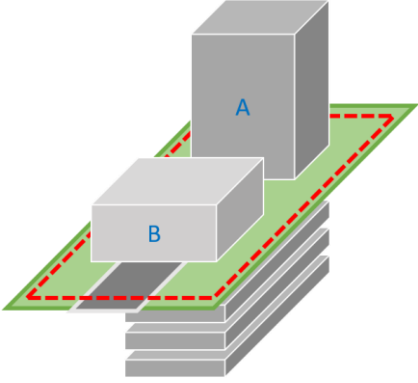
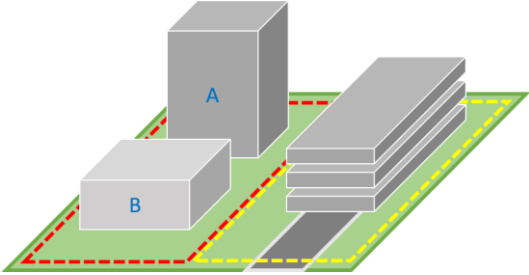
Note: Ownership is not considered in the **onsite/offsite** classification of the **shared facility**. A **shared facility** could be considered **onsite**, even if the system is owned and operated by a separate entity to the building.

Conversely, if a **shared facility** is located **offsite** but is owned and operated by the same entity as the building, it is still considered **offsite**.

Table 3.4 shows how this is applied to common **shared facilities** arrangements.

Table 3.4: Onsite and offsite shared facilities

Example	Treatment
 <p>Figure 3.4.1: Shared facility within precinct</p>	<p>Two buildings “A” and “B” share a facility (e.g. a car park), which is located within the precinct.</p> <p>The shared facility is considered onsite for both buildings.</p>

 <p>Figure 3.4.2: Underground shared facility connecting both buildings</p>	<p>Two buildings “A” and “B” share a facility (e.g. a car park), which is located in the basement levels joining the two buildings.</p> <p>The shared facility is considered onsite for both buildings.</p>
 <p>Figure 3.4.3: Facility outside of precinct but owned and operated by same entity</p>	<p>The facility is not located within the physical boundaries of the precinct.</p> <p>The car park is owned and operated by the same entity as buildings “A” and “B.”</p> <p>The shared facility is considered offsite for both buildings.</p>

3.5 Allocating energy and water use

3.5.1 General

The energy or water used by a **shared facility** may be allocated among **building sections** with provision or access to the **shared facility** using one of the following methodologies, unless otherwise specified in this **Ruling**.

The energy or water associated with the provision of **shared services** may also be allocated among **building sections** using one of the following methodologies, unless otherwise specified in this **Ruling**.

The order of priority for allocating is listed as shown in Table 3.5.1.

Table 3.5.1: Order of priority for allocating energy and water use

	Order of priority	Reference
1	<i>Financial reconciliation</i> based on leasing or contractual agreements to each building section sharing the facility.	3.5.2
2	<i>Area-based allocating</i> of the building section versus the total service area of the shared facility .	3.5.3
3	<i>Full allocation</i> of the energy or water consumption for the shared facility to the rated premises .	3.5.4

3.5.2 Financial reconciliation

The energy and water used by a **shared service or shared facility** may be allocated based on leasing or contractual agreements to each **building section** sharing the service or facility.

The following conditions must be met:

- a) Adequate metering is in place to determine the energy or water consumption of the **shared service or shared facility** during the **rating period**, see Section 3.6.
- b) Leasing or contractual documentation that is compliant with the relevant standards for **acceptable data** is available, assigning a proportion of the costs of the energy or water use captured by the meter to each **building section** sharing the facility.

The energy and/or water use may be allocated based on the proportion of the costs which is allocated to each building or **building section** in the lease or contract.

3.5.3 Area-based allocating

The energy or water used by a **shared facility** may be allocated based on the area of the **building section** versus the total service area of the **shared facility**.

Similarly, a **shared service** may be allocated based on the **building section** area versus the total service area of the **shared service**.

The following conditions must be met:

- a) Adequate metering is in place to determine the energy or water consumption of the **shared service or shared facility** during the **rating period**, see Section 3.6.
- b) Area documentation is compliant with the relevant **Rules** for each **building section** sharing the service.

The energy and/or water use may be allocated based on the ratio of floor area of each building to the area of all buildings sharing the facility.

3.5.4 Full allocation

If neither the financial reconciliation (see Section 3.5.2) nor the area-based allocating methodology (see Section 3.5.3) can be applied, then the entire energy and/or water consumption for the **shared service or shared facility** must be added to the **rated premises**.

Where multiple ratings of the same **building sector** are being sought for the same **precinct** (e.g. two office ratings, one for each office building, at a commercial **precinct**), the entire energy and/or water consumption for the **shared service or shared facility** must be added to both ratings.

Where multiple ratings for different **building sectors** are being sought for the same **mixed-use building or precinct** (e.g. an office rating and a shopping centre rating), the entire energy and/or water consumption for the **shared service or shared facility** must be added to both ratings.

3.6 Metering

All metering arrangements/configurations must meet the metering and validation requirements of the [NABERS Metering and Consumption Rules](#) or, where this is not applicable, the **Rules** that are otherwise relevant for the **rated premises**. This includes meter validation and ensuring the relevant minimum energy or water coverage for **building sections** are met.

Where a meter (or group of meters) covers the energy or water use that is to be allocated, the allocating may only be carried out if that meter (or group of meters) does not include those end uses which are required to be included under the minimum energy or water coverage.

For example, the submetering in a car park which measures the lighting and ventilation energy consumption should not include other end uses such as a lift that also services the office building. The allocation will include the lift energy use as well, which is needed to meet the office building's minimum energy coverage.

3.7 Documentation

Assessors must collect and retain evidence to demonstrate they meet the criteria under this **Ruling**.

Additional documentation required to comply with this **Ruling** include the following:

- a) Floor plans/schedules with the area for all **building sections** included in the allocation calculation. They should be marked up showing relevant areas (e.g. common space) and what the area is, e.g. office, hotel, retail.
- b) Documentation defining what each section is.
- c) All calculations with notations that can be followed by an auditor, demonstrating how all allocation figures are calculated.

All methodologies for **shared services** and **shared facilities** outlined in this **Ruling** are considered to be acceptable estimates and are not added to the potential error for the rating.

Note: Alternative methodologies may be accepted (pending the written approval of the **National Administrator**) but may be added to the potential error.

Assessors remain responsible for the accuracy of their ratings and must collect and retain all documentation in accordance with the **Rules**.

If an **Assessor** is uncertain of the evidence type, they should contact the **National Administrator** for further information in advance.

4 Shared services

4.1 General

Methodologies for allocating energy and water use of specific **shared services** are outlined in Sections 4.2 to 4.4.

For **shared services** which are not specifically addressed in the following sections, **Assessors** must refer to the general requirements outlined in Section 3.5.

4.2 Vertical transport

Vertical transport may be shared between **building sections** that use a common lift bank or are connected by escalators. Vertical transport may only be allocated where there are common lifts or escalators connecting the **building sections**.

The energy associated with a common lift bank or escalator may be allocated on the ratio of the area of the **rated premises** versus the service coverage area of the vertical transport. The area of the entry level floor(s) to the building must be excluded from this calculation if there are no below ground levels that utilise the vertical transport system.

Energy use associated with the vertical transport that is subject to such allocating must be adequately submetered, see Section 3.6. In the absence of adequate submetering, the energy use associated with the vertical transport must be allocated in full for each **building section** in order to meet the minimum energy coverage.

Note: The principle objective is to capture the energy associated with the vertical transport for all parties that benefit from it. Ground floor spaces by nature are not considered to make use of vertical transport for general access unless the building includes basement level floors or there are multi-level entrances to the building.

Example: A **mixed-use building** consists of nine floors, including the ground floor lobby. There are no basement floors. The building composition is as follows:

Floor	Section type	Area (m ²)
8	Office (NLA)	1,000
7	Office (NLA)	1,200
6	Office (NLA)	1,200
5	Office (NLA)	1,200
4	Office (NLA)	1,200
3	Hotel (GFA)	1,200
2	Hotel (GFA)	1,200
1	Retail (GLAR)	1,500
Ground	Retail (GLAR)	300

	Common space (i.e. foyer and lift lobby)	1,000
Total		11,000

A common bank of lifts is servicing the office, hotel and retail **building sections**. The energy use associated with the lifts is adequately submetered in accordance with the **Rules** and can be allocated based on the area as follows:

Step 1: Determine the **building sections** which meet the minimum 20 % threshold (2,000 m²) of the **total assessable area** (10,000 m²):

$$\sum Area_{Office (NLA)} = 5,800 \text{ m}^2 > 2,000 \text{ m}^2 \checkmark$$

$$\sum Area_{Hotel (GFA)} = 2,400 \text{ m}^2 > 2,000 \text{ m}^2 \checkmark$$

$$\sum Area_{Retail (GLAR)} = 1,500 \text{ m}^2 < 2,000 \text{ m}^2 \times$$

Step 2: Sum the area of the **building sections** serviced by the common lifts:

$$\sum Area_{Common lifts service coverage} = Area_{Office (NLA)} + Area_{Hotel (GFA)}$$

$$\sum Area_{Common lifts service coverage} = (5,800) + (2,400)$$

$$\therefore \sum Area_{Common lifts service coverage} = 8,200 \text{ m}^2$$

Step 3: Determine the proportion of each **building section** area to the service coverage area of the common lifts:

$$Office_{Proportion} = \frac{Office\ area}{Service\ coverage\ area}$$

$$Office_{Proportion} = \frac{5,800}{8,200}$$

$$\therefore Office_{Proportion} = 70.73 \%$$

$$Hotel_{Proportion} = \frac{Hotel\ area}{Service\ coverage\ area}$$

$$Hotel_{Proportion} = \frac{2,400}{8,200}$$

$$\therefore Hotel_{Proportion} = 29.27 \%$$

Step 4: Allocate the energy use by multiplying the lift bank's total energy use by the percentage. Assume the common lift bank in this example used 85,000 kWh in the **rating period**:


$$Office_{Lift\ energy} = (70.73 \%) \times (85,000)$$

$$\therefore Office_{Lift\ energy} = 60,120.5 \text{ kWh}$$

$$Hotel_{Lift\ energy} = (29.27 \%) \times (85,000)$$

$$\therefore Hotel_{Lift\ energy} = 24,879.5 \text{ kWh}$$

4.3 Exterior lighting and external signage

 This section (4.3) is partly captured for office ratings under the [NABERS Energy and Water for Offices Rules](#).

4.3.1 General

A **mixed-use building** may have exterior lighting and external signage for the benefit of the building owners or occupants. All energy use associated with exterior lighting and external signage that is subject to allocating must be adequately submetered and comply with the [NABERS Metering and Consumption Rules](#), see Section 3.6.

Note: The principle objective is to capture the energy associated with exterior lighting and external signage for all parties that benefit from it.

4.3.2 Exterior lighting

Energy associated with exterior lighting is allocated using the following methodology:

- a) Identify all exterior lighting. All exterior lighting provided for the purposes of illuminating the external building in general and common thoroughfares is considered to be shared.
- b) Allocate the energy use of exterior lighting based on the ratio of each **building section's** respective area to the **total assessable area**.

Other exterior lighting which exclusively services a space dedicated to a specific **building section** must be allocated to that respective **building section**.

Assessors must keep clear documentation on assumptions and methodologies applied, see Section 3.7.

4.3.3 External signage

Energy associated with external signage is allocated using the following methodology:

- a) Identify all external signage.
- b) External signage dedicated to a single **mixed-use building** is considered to be shared among its **building sections**. This includes external signage where the building owner's name appears.
- c) External signage dedicated to multiple buildings or whole of **precinct** is considered to be shared among all **building sections** identifiable within said buildings or **precinct**.
- d) External signage dedicated to a tenant, which is not provided by the building owner as a condition of lease, is allocated to that respective tenant.


Assessors must keep clear documentation on assumptions and methodologies applied, see Section 3.7.

Example: An **Assessor** identifies two external signs at a business park **precinct**. The **precinct** consists of three buildings, i.e. two office towers and one mixed-use retail/hotel building.

Sign A advertises the two office towers as a collective, e.g. NABERS Business Towers. The energy use associated with Sign A is allocated to **building sections** within the two office towers only.

Sign B advertises the entire **precinct**, e.g. NABERS Business Park. The energy use associated with Sign B is allocated to **building sections** among all three buildings at the **precinct**.

4.4 Diesel and batch-delivered supplies

 The treatment of diesel and batch-delivered supplies is captured under the [NABERS Metering and Consumption Rules](#).

This section (4.4) should be read in conjunction with the **Rules**.

A mixed-use building may have diesel and batch-delivered supplies provided for the benefit of the building owners or occupants.

All energy use associated with diesel and batch-delivered supplies may be subject to area-based allocating (see Section 3.5.3) but must have the same end use between the **building sections**.

If applying the financial reconciliation method (see Section 3.5.2) for allocating, **Assessors** are not required to confirm the end use is the same for diesel and batch-delivered supplies across **building sections**.

5 Shared facilities

5.1 General

Methodologies for allocating energy and water use of specific **shared facilities** are outlined in Sections 5.2 to 5.9.

For **shared facilities** which are not specifically addressed in the following sections, **Assessors** must refer to the general requirements outlined in Section 3.5.

5.2 Public access and exclusive use

As a guiding principle, **shared facilities** which are open to members of the public for access or use are not considered to be ancillary functional spaces to support the respective **building sections** but rather functioning on their own as retail tenancies or similar. Therefore, **shared facilities** must be for the exclusive use of the occupants of the respective **building sections** in order to have their energy and water allocated as outlined in Section 3.5, unless otherwise specified in the subsequent sections.

Note: **Assessors** are encouraged to contact the **National Administrator** if further guidance or clarification is needed or to propose an alternative methodology in accordance with Section 1.3.

5.3 Foyers, lobbies and common spaces

A **mixed-use building** may have common entry points, foyers, lobbies, walkways and other areas that are used by several (or all) **building sections**. Energy and water use associated with these common spaces may only be allocated between the areas that use the spaces for access.

Energy and water used by common spaces is allocated using the following methodology:

- a) Identify all foyer, lobby, walkway and common indoor areas. All common spaces, such as foyers, lift lobby areas or thoroughfares with standard paths of access to multiple **building sections**, are considered to be shared.
- b) All walkway areas between building entrances and common lift lobbies and foyers are allocated as shared.
- c) Lift lobbies and foyers on floors dedicated to a **building section** are allocated to that section, even if they are accessible by occupants from other sections, e.g. a lift lobby on a floor dedicated to retail is allocated to the retail section.

The energy and water associated with shared common spaces may be allocated on the ratio of the area of the **rated premises** versus the **total assessable area** of **building sections** that use the common spaces for access.

Energy and water use associated with the provision of services to common spaces that is subject to such allocating must be adequately submetered, see Section 3.6. In the absence of adequate submetering, the energy and water use associated with these services must be allocated in full for each **building section** in order to meet the minimum energy coverage.

Note: The principle objective is to capture the energy and water associated with common space use for all parties that benefit from it.

Assessors may find variations or alternative site configurations that challenge these guiding principles. In such cases, **Assessors** are encouraged to contact the **National Administrator** for guidance or to propose an alternative methodology in accordance with Section 1.3.

Example: A **mixed-use building** consists of six floors, including the ground floor lobby, with a lift bank. The building composition is as follows:

Floor	Section type	Area (m ²)
5	Office (NLA)	1,200
	Common space accessible from lift lobby	100
4	Office (NLA)	1,200
	Common space accessible from lift lobby	100
3	Hotel (GFA)	1,200
	Common space accessible from lift lobby	100
2	Hotel (GFA)	400
	Retail (GLAR)	800
	Common space accessible from lift lobby	100
1	Retail (GLAR)	1,500
	Common space accessible from lift lobby	100
Ground	Retail (GLAR)	300
	Common space (i.e. foyer and lift lobby)	700
Total		7,800

The energy use associated with the common space is separately submetered on each floor and validated in accordance with the **Rules**. Area-based allocating can be applied as follows:

Step 1: Determine the **building sections** which meet the minimum 20 % threshold (1,320 m²) of the **total assessable area** (6,600 m²):

$$\sum Area_{Office(NLA)} = 2,400 \text{ m}^2 > 1,320 \text{ m}^2 \checkmark \dots (36.36 \% \text{ of total assessable area})$$

$$\sum Area_{Hotel(GFA)} = 1,600 \text{ m}^2 > 1,320 \text{ m}^2 \checkmark \dots (24.24 \% \text{ of total assessable area})$$

$$\sum Area_{Retail(GLAR)} = 2,600 \text{ m}^2 > 1,320 \text{ m}^2 \checkmark \dots (39.39 \% \text{ of total assessable area})$$

Step 2: For each floorplate, allocate the common area by the **building section** proportion of that floorplate.

Step 2a): The ground floor foyer is proportionally allocated between all three **building sections** since it serves as a thoroughfare for each. Assume the foyer energy is 15,000 kWh:

$$Office_{Foyer\ energy} = (36.36\%) \times (15,000)$$

$$\therefore Office_{Foyer\ energy} = 5,455 \text{ kWh}$$

$$Hotel_{Foyer\ energy} = (24.24\%) \times (15,000)$$

$$\therefore Hotel_{Foyer\ energy} = 3,636 \text{ kWh}$$

$$\text{Retail}_{\text{Foyer energy}} = (39.39\%) \times (15,000)$$

$$\therefore \text{Retail}_{\text{Foyer energy}} = 5,909 \text{ kWh}$$

Step 2b): The hotel and retail **building sections** both share a portion (one-third and two-thirds respectively) of the floorplate area on Level 2. The common space area is therefore allocated between the two **building sections** accordingly for this floor. Assume the energy is 8,000 kWh:

$$\text{Hotel}_{\text{Proportion}} = \frac{\text{Hotel assessable area}}{\text{Floorplate assessable area}}$$

$$\text{Hotel}_{\text{Proportion}} = \frac{400}{1,200}$$

$$\text{Hotel}_{\text{Proportion}} = 33.33\%$$

$$\text{Hotel}_{\text{L2 Common energy}} = (33.33\%) \times (8,000)$$

$$\therefore \text{Hotel}_{\text{L2 Common energy}} = 2,666 \text{ kWh}$$

$$\text{Retail}_{\text{Proportion}} = \frac{\text{Retail assessable area}}{\text{Floorplate assessable area}}$$

$$\text{Retail}_{\text{Proportion}} = \frac{800}{1,200}$$


$$\text{Retail}_{\text{Proportion}} = 66.66\%$$

$$\text{Retail}_{\text{L2 Common energy}} = (66.66\%) \times (8,000)$$

$$\therefore \text{Retail}_{\text{L2 Common energy}} = 5,333 \text{ kWh}$$

Step 3: Review for all other floors and sum the common area energy for each respective **building section**.

5.4 Car parks

 This section (5.4) is not applicable for office ratings. **Assessors** should refer to the [NABERS Energy and Water for Offices Rules](#) for car park energy allocating for offices.

Shopping centres and apartment buildings require a physical count of car parking spaces, in accordance with the respective **Rules**.

A car park may be used by a number of different **building sections** within a **precinct** or **mixed-use building**. The energy use associated with a car park is allocated to **building sections** in the following order of priority:

- A commercial agreement (such as a lease) that clearly assigns a proportion of measured car park energy use to the **building sections**.
- The number of car parking spaces allocated to **building sections** by way of designated parking spaces or pass cards/keys versus the total number of car parking spaces.

Where pass cards or keys have been issued to a **building section**, the number of parking spaces allocated to that section is the greater of one of the following:

- The number of physically dedicated parking spaces.
 - The number of pass cards or keys issued (to a limit of the total number of parking spaces).
- The ratio of the area of the **building sections** that have access versus the **total assessable area** serviced by the car park.

Dedicated car parking spaces, pass card or key allocation data must be sourced from a third-party commercial agreement between the tenant or beneficiary and the landlord or car park operator.

Energy use associated with the car parking facilities that are subject to such allocating must be adequately submetered, see Section 3.6. This includes the energy used for lighting, ventilation and equipment related to the operation of the car park such as ticket machines and boom gates.

Vertical transport that is dedicated to movement within the car park, or to and from the car park, is to be treated as a part of the car parking facility. However, vertical transport with direct access to **building sections** is not considered dedicated to car parking facilities and must instead be treated in accordance with the respective minimum energy coverage of the **building sections** they provide access to.

In the absence of adequate submetering, the energy use associated with the car parking facilities must be allocated in full for each **building section** in order to meet the minimum energy coverage.

Note: The principle objective is to capture the portion of energy used to provide car parking facilities for each **building section** that may benefit from it. Where an **Assessor** observes a mixture of Section 5.4 Items a), b) or c) at the premises, guidance should be sought from the **National Administrator**.

5.5 Loading docks

Loading docks are often integrated in a car park and their energy use not separately submetered. In these cases, the combined energy use of the car park and loading docks must be allocated in accordance with the provisions of Section 5.4.

Where loading docks have their own lighting and ventilation services that are adequately submetered, the energy use can be allocated on the area ratio of **building sections** that use the loading dock versus the **total assessable area** serviced by the loading dock.

5.6 Swimming pools and gyms

⚠ Shopping centres require the total **GLAR** of all gyms in the shopping centre to ensure a fair comparison of the water consumption benchmarks.

For shopping centres, **Assessors** should refer to the [NABERS Energy and Water for Shopping Centres Rules](#).

A swimming pool and/or gym in a **precinct** or **mixed-use building** may be accessed and shared by occupants from different **building sections**. Energy and water use associated with the swimming pool and/or gym may be allocated if the following occurs:

- The **shared facility** is not publicly accessible, i.e. the swimming pool and/or gym is for the exclusive use of occupants in the **building sections**.
- Occupants of **building sections** have access to the **shared facility**, regardless of whether they opt to use it.

The energy and water use associated with swimming pools and gyms may be allocated on the ratio of the area of the **rated premises** versus the **total assessable area** of **building sections** (as determined by Section 3.3.2) whose occupants have access.

Swimming pools and gym facilities are considered a retail tenancy if one of the following occurs:

- 1) The facilities are located in the retail section of a **precinct** or **mixed-use building**.
- 2) The facilities are accessible, or offer membership, to the general public.

Swimming pools and gyms that are considered retail tenancies must be treated as such and not have its subsequent energy and water use apportioned.

Energy and water use associated with the swimming pool and/or gym that is subject to such allocating must be adequately submetered, see Section 3.6. In the absence of adequate submetering, the energy and water use associated with the swimming pool and gym facilities must be allocated in full for each **building section** in order to meet the minimum energy and water coverage.

Note: The principle objective is to capture the portion of energy and water used in the provision of swimming pool and gym facilities for each **building section** that may benefit from it.

Example: A **mixed-use building** contains a swimming pool shared between apartment building residents and hotel guests. The building composition is as follows:

Floor	Section type	Area (m ²)
6	Apartment building (GFA)	1,350
5	Apartment building (GFA)	1,350
4	Apartment building (GFA)	1,350
3	Hotel (GFA)	1,500
2	Hotel (GFA)	1,500
1	Retail (GLAR)	1,500
Ground	Common space (i.e. lobby)	1,000
Total		9,550

The energy and water use associated with the swimming pool is adequately submetered in accordance with the **Rules** and can be allocated based on the area as follows:

Step 1: Sum the area of the **building sections** serviced by the swimming pool which are greater than 20 % (1,710 m²) of the **total assessable area** (8,550 m²):

$$\sum Area_{Swimming\ pool} = Area_{Apartment\ building} + Area_{Hotel}$$

$$\sum Area_{Swimming\ pool} = (4,050) + (3,000)$$

$$\therefore \sum Area_{Swimming\ pool} = 7,050\ m^2$$

Step 2: Determine the proportion of each area to the total area serviced by the swimming pool:

$$Apartment\ building\ Proportion = \frac{Apartment\ building\ area}{Total\ area}$$

$$Apartment\ building\ Proportion = \frac{4,050}{7,050}$$

$$\therefore \text{Apartment building Proportion} = 57.45\ \%$$

$$Hotel\ Proportion = \frac{Hotel\ area}{Total\ area}$$

$$Hotel\ Proportion = \frac{3,000}{7,050}$$

$$\therefore \text{Hotel Proportion} = 42.55\ \%$$

Step 3: Allocate the energy and water use by multiplying the swimming pool's consumption by the percentage. Assume the swimming pool in this example used 120,000 kWh in the **rating period**:

$$\text{Apartment building}_{\text{Swimming pool energy}} = (57.45\%) \times (120,000)$$

$$\therefore \text{Apartment building}_{\text{Swimming pool energy}} = \mathbf{68,940 \text{ kWh}}; \text{ and}$$

$$\text{Hotel}_{\text{Swimming pool energy}} = (42.55\%) \times (120,000)$$

$$\therefore \text{Hotel}_{\text{Swimming pool energy}} = \mathbf{51,060 \text{ kWh}}$$

If adequate submetering was not in place, both the apartment building and hotel would be required to include the entire swimming pool consumption of 120,000 kWh in each of their respective ratings to ensure the minimum coverage is met.

5.7 End-of-trip facilities

End-of-trip facilities are increasingly common in new buildings and may constitute showers, change rooms, lockers and bike storage areas. Energy and water use associated with the end-of-trip facilities may be allocated, provided that:


- The **shared facility** is not publicly accessible, i.e. the end-of-trip facility is for the exclusive use of occupants in the **building sections**.
- Occupants of **building sections** have access to the **shared facility**, regardless of whether they opt to use it.

The energy and water use associated with end-of-trip facilities may be allocated on the ratio of the area of the **rated premises** versus the **total assessable area** of **building sections** (as determined by Section 3.3.2) whose occupants have access.

Energy and water use associated with the end-of-trip facility that is subject to such allocating must be adequately submetered, see Section 3.6. In the absence of adequate submetering, the energy and water use must be allocated in full for each **building section** in order to meet the minimum energy and water coverage.

Note: The principle objective is to capture the portion of energy and water used to provide end-of-trip facilities for each **building section** that may benefit from it.

5.8 Restaurants

 Hotels require onsite kitchens and restaurants servicing guests with charge-to-room facilities to be included in the minimum energy coverage.

For hotels, **Assessors** should refer to the [NABERS Energy and Water for Hotels Rules](#).

Restaurants may be located in a **mixed-use building** but are typically treated as a retail tenancy when it is not for the exclusive use of occupants from other **building sections**.

Restaurant facilities are allocated to hotel ratings and included in the hotel minimum energy and water coverage if the following occurs:

- The restaurant is located **onsite**.
- The restaurant is providing charge to room services to hotel guests.

The energy and water consumption associated with a restaurant with charge to room facilities cannot be allocated and must be included in full for the hotel rating.

Note: The principle objective is to distinguish between restaurants that are primarily servicing the hotel (and therefore must be included in the hotel's minimum energy and water coverage in accordance with the [NABERS Energy and Water for Hotels Rules](#)) and restaurants which are simply located within the building, i.e. retail tenancies.

5.9 Exclusive hotel clubs

The energy and water use associated with the exclusive hotel club may be allocated based on the area ratio of **building sections** that share membership benefits, e.g. a residential section of the building may also have access to the club.

Appendix A List of changes

The following table documents the history of the content of *NABERS Shared Facilities* (20 May 2014) and *NABERS Shared Services for Mixed-use Buildings* (December 2015) which have been amalgamated in order to produce this version 1.0.

Shared Services and Facilities Ruling – Chapter 1 – Overview			
The structure and contents of Chapter 1 has been revised and updated. New sections were added to bring the structure of this Ruling in alignment with other Rules and Rulings .			
NABERS Shared Facilities (20 May 2014 version)	NABERS Shared Services for Mixed-use Buildings (December 2015 version)	Version 1.0 (this document)	Content changes
1 Purpose	1 Purpose and principle	1 Introduction	Title changed. Chapter 1 has a new section structure as follows: a) Summary. b) Interpretation of the Rules and Rulings. c) Situations not covered by the Rules. d) How to use this document. e) Related documents.

Shared Services and Facilities Ruling – Chapter 2 – Terms and definitions

Chapter 2 now provides a detailed list of key terms and definitions used in this **Ruling**.

NABERS Shared Facilities (20 May 2014 version)	NABERS Shared Services for Mixed-use Buildings (December 2015 version)	Version 1.0 (this document)	Content changes
3 Definitions	N/A	2 Terms and definitions	This chapter now provides a detailed list of key terms and their definitions used throughout this document. New definitions have also been provided which were either absent or not clearly defined from the 2014 version.

Shared Services and Facilities Ruling – Chapter 3 – Key concepts and procedures

Chapter 3 now contains the purpose and scope of this amalgamated **Ruling**, as well as outlining the methods used for allocating the energy and water consumption associated with **shared services** and **shared facilities**. Metering and documentation requirements have also been relocated to this section.

NABERS Shared Facilities (20 May 2014 version)	NABERS Shared Services for Mixed-use Buildings (December 2015 version)	Version 1.0 (this document)	Content changes
1 Purpose	1 Purpose	3.1 Purpose	The purpose has been amalgamated for shared services and shared facilities .

2 Scope	2 Scope	3.2 Scope	<p>The scope between the two previous versions is now consolidated to give a holistic view of the shared services and shared facilities scope.</p> <p>Scenarios specifically addressed by both shared services and shared facilities under this Ruling are short-listed in this section.</p>
N/A	2.1 Threshold	3.3 Area threshold	<p>Title amended.</p> <p>Further guidance is provided on the measurement standard to apply for different building sections.</p>
N/A	3 Floor area	3.3.2 Defining floor area	<p>Title amended.</p> <p>Further guidance is provided on the measurement standard to apply for different building sections.</p> <p>The measurement for warehouses, cold storage and industrial areas (Gross Lettable Area (GLA) must be used for allocation) has now been added to the list.</p>
4 Assessment of shared facilities	N/A	3.4 Location of shared facilities	<p>Title amended.</p> <p>Onsite and offsite locations are clarified for treatment of shared facilities.</p>
4.2 Apportioning energy and water used by shared facilities	N/A	3.5 Allocating energy and water use	<p>Title amended.</p> <p>Energy and water use now incorporates allocation of shared facilities and the provision of shared services for building sections.</p> <p>An order of priority list has been provided for financial reconciliation and area-based allocation methods.</p>
4.2.1 Financial reconciliation	N/A	3.5.2 Financial reconciliation	List formatting updated.
4.2.2 Area-based apportioning	N/A	3.5.3 Area-based allocating	<p>Title amended.</p> <p>The information on areas not defined by existing NABERS Rules has been removed and is now covered under Section 3.3.2.</p>

4.2.3 Full allocation	N/A	3.5.4 Full allocation	Information on multiple ratings of the same building sector and of different building sectors has been added.
4.3 Compliant metering	4.10 Metering	3.6 Metering	Title amended. Information on virtual and thermal meters has been removed. Information on meter validation and ensuring the relevant minimum energy or water coverage for building sections are met has now been added.
N/A	4.11 Documentation	3.7 Documentation	Acceptable data for hours removed from list to avoid confusion.

Shared Services and Facilities Ruling – Chapter 4 – Shared services

Chapter 4 lists specific **shared services** scenarios addressed by this **Ruling**.

NABERS Shared Facilities (20 May 2014 version)	NABERS Shared Services for Mixed-use Buildings (December 2015 version)	Version 1.0 (this document)	Content changes
N/A	4.2 Vertical transport	4.2 Vertical transport	Energy used by escalators has now been added. The objective of capturing energy use has been expanded. The example has been revised and further clarified.
N/A	4.6 Exterior lighting and external signage	4.3 Exterior lighting and external signage	Further guidance and clarification is provided to both exterior lighting and external signage shared services. An example is provided for external signage.

N/A	N/A	4.4 Diesel and batch-delivered supplies	New section added, clarifying the approach towards shared diesel and batch-delivered supplies.
-----	-----	---	--

Shared Services and Facilities Ruling – Chapter 5 – Shared facilities

Chapter 5 lists specific **shared facilities** scenarios addressed by this **Ruling**.

NABERS Shared Facilities (20 May 2014 version)	NABERS Shared Services for Mixed-use Buildings (December 2015 version)	Version 1.0 (this document)	Content changes
N/A	N/A	5.2 Public access and exclusive use	New section added, providing guidance on when to treat a facility as a shared facility versus a retail tenancy or other non-exclusive use.
4.1 Coverage	N/A	5.3 to 5.9	List of facilities and services have now been revised and restructured into separate sections with the following headings: <ul style="list-style-type: none"> a) Foyers, lobbies and common spaces. b) Car parks. c) Loading docks. d) Swimming pools and gyms. e) End-of-trip facilities. f) Restaurants. g) Exclusive hotel clubs.

N/A	4.5 Foyers, lobbies and common spaces, and 5.1.3 Common spaces	5.3 Foyers, lobbies and common spaces	Energy and water associated with shared common spaces may be allocated on the ratio of the area of the rated premises versus the total assessable area of building sections that use the common spaces for access. A detailed example is provided.
N/A	4.1 Car parks	5.4 Car parks	Vertical transport used within car parks is now added to this section, including clarification of what is dedicated vertical transport.
N/A	4.1.1 Loading docks	5.5 Loading docks	Energy use is allocated between the area ratio of building sections that use the loading dock versus the total assessable area serviced by the loading dock.
N/A	4.3 Swimming pools, 4.4 Gyms and 5.1.2 Pool	5.6 Swimming pools and gyms	Title amended. The treatment of swimming pools and gyms have been combined. A detailed example is provided.
N/A	4.7 Restaurants	5.8 Restaurants	The conditions for a restaurant to be allocated in a hotel rating and included in the hotel minimum energy and water coverage have been amended.
N/A	4.8 Exclusive hotel clubs	5.9 Exclusive hotel clubs	This section remains unchanged.
N/A	4.9 Hotels	N/A	This section has been removed.
N/A	5 Examples	N/A	This section has been removed. Examples are now relocated to appear in the relevant sections.

Contact us

**NABERS is administered by the NSW
Government**

4 Parramatta Square
12 Darcy Street
Parramatta NSW 2150

T (02) 9995 5000

E nabers@environment.nsw.gov.au

W nabers.gov.au